

**ABSTRACT****ENHANCED PRODUCTION OF *STREPTOCOCCUS MUTANT*  
MUTACIN I AND III**

**[0043]** Methods for producing a mutacin, by growing a mutacin-producing cell in a liquid medium under conditions in which mutacin is produced and isolating mutacin from the liquid medium. Methods are also provided for isolating and purifying mutacin I/III from fermentation broths of *Streptococcus mutans* strains CH43 and UA787 to homogeneity. Fermentation are conducted in anaerobic bioreactors under anaerobic conditions at a cultivation temperature of about 35-42°C, with agitation rate of between 50-250 rpm.